Chapter VI

EARLY AVIATION TRAINING

The outbreak of the war in Korea imposed an immediate requirement for the expansion of aviator and mechanic training. The Department of the Army increased the authorized overstrength of Army aviators from 50 to 100 percent, began the activation of helicopter transportation companies, and started calling up Reserve Component units. In addition, a standing requirement for twelve replacement pilots each month was established for the Far East Command. The recent transfer of 200 airplane and engine mechanics to light maintenance units had left tactical units short of qualified mechanics. The activation of the helicopter transportation companies and other new units would further increase the requirements for mechanics.

The Impact of the Korean Conflict

Even before the Korean conflict, the Department of the Army had asked the Air Force to increase the class capacity of the Army liaison pilot course from forty to sixty students, but the Air Force stated that no aircraft were available to meet that requirement. Possible solutions to the training problem included the purchase of Piper PA-19 aircraft for training and utilization of civilian contractors, as had been done during World War II. The utilization of civilian contractors seemed to be the best solution to the OCAFF G-3, as it would eliminate problems of men and equipment.

The general feeling within the Department of the Army was that the Army could handle its own training program. In August 1950, the OCAFF G-3 Section recommended that the Army begin conducting all aviation personnel training and phase out Air Force training as early as practicable. An Army training plan would be developed, the Air Force would be advised of the proposed action, and plans would be made to phase out Air Force training and to withdraw Army equipment then being used by the Air Force.[1]

The OCAFF G-3 calculated that at that time there was an immediate requirement for training approximately 919 Army aviators to meet Regular Army needs alone—a 144 annual requirement in the Far East Command, 200 for helicopter transportation companies, and 575 to build up to authorized strength. In addition, the National Guard Bureau had a requirement for 200 Army aviators per year, and the Organized Reserve Corps was short aviators. Although

personnel reports indicated a surplus of airplane and engine mechanics, G-3 did not believe there was an actual surplus. Plans for training would have to be sufficiently flexible to permit expansion on short notice. Also, the rotary wing mechanic training program had to be expanded to meet the needs of the helicopter transportation companies.

The Artillery School reported that it could train the Army's aviators and airplane and engine mechanics. It also reported that it could expand to a maximum annual output of 480 Army aviators, and, if additional expansion were required, civilian Civil Aeronautics Administration approved schools could be used for the basic phase of the Army aviator course and also airplane and engine mechanics training.

The proposal of the Artillery School reflected a 157 percent increase in the capacity of the Army fixed wing aviator course, although there would be very little change in the capacity of the helicopter pilot, airplane and engine mechanic, and rotary wing mechanic courses. The expansion required a 147 percent increase in personnel and a 50 percent increase in aircraft. In addition to aircraft, necessary additional equipment, facilities, training aids, and $20,000 for rehabilitation of class rooms would be required.

The OCAFF G-3 reported that training could be implemented with an Army aviator course nine weeks after receipt of the directive; a helicopter pilot course ten days after receipt, if additional personnel were available; and an Army airplane and engine mechanic course and an Army rotary wing mechanic course four weeks after the rehabilitation of class rooms.[2]

As a result of these recommendations, on 24 August 1950, General Mark W. Clark proposed that the Army conduct all training of Army aviation personnel and that the Army Field Forces be authorized to take the necessary action to implement such a program. These recommendations found considerable support at Department of the Army level and resulted in the establishment of the Joint Ad Hoc Committee on Evaluation of the Current System of Training Army Aviators and Mechanics in January 1951. The committee, composed of representatives from the Army and the Air Force, was to determine whether or not the current system satisfied qualitative and quantitative requirements for trained personnel and whether or not it achieved optimum utilization of committed resources. Matters considered by the committee included the accomplishment of the training objective, maximum use of available facilities and manpower, provision of a continuing source of men in the event of mobilization, and improvement of training procedures. The qualification of instructors, flying techniques for combat missions, and the reduction of the number of washouts also were considered.

The Air Force continued to voice strong objections to the transfer of the entire training mission to the Army. As a result of the failure to reach a satisfactory agreement between the two services, the transfer of responsibilities had to await the final approval of the entire Army aviation program. No basic changes in the training system were therefore made until the establishment of the Army Aviation School.[3]

Helicopter Pilot Training

While the Army and the Air Force continued their dispute over the control of training, the existing training programs steadily expanded. Reflecting the growing Army interest in helicopters, the number of graduates from the tactical helicopter course increased from eight in the first class on 8 December 1948 to 274 by fiscal year 1953. Early in 1951, the enrollment of the Army Field Forces Helicopter Pilot Course had jumped to 18 students, while the class capacity for helicopter pilots trained by the Air Force was raised from 6 to 11 students. The overall program stayed at one class every two weeks.

In November 1950, Army Field Forces asked the Artillery School to provide requirements for training pilots and mechanics for helicopter transportation companies. OCAFF anticipated that personnel and equipment previously requested in October, except light cargo helicopters, would be available by February, with the starting date of each class approximately 1 March. The class capacity for both pilots and mechanics was set at fifty, with the duration of the courses not to exceed nineteen weeks. Each of the classes was scheduled to terminate at an appropriate time for the activation of the respective helicopter transportation companies in accordance with the anticipated delivery schedule of cargo helicopters from the manufacturer. The Artillery School scheduled the Army Helicopter Transport Class to be twelve weeks long, since it expected that students would be selected from among trained Army aviators. All remaining pilot classes would be nineteen weeks. Since the students for the first Army Helicopter Transport Mechanics Class were to be trained automobile mechanics, that class would be thirteen weeks long, with subsequent classes being sixteen weeks.

The Artillery School noted that in order to conduct the training, it would be necessary to augment the proposed tables of distribution for the staff and faculty of the Air Training Department by 41 officers, 1 warrant officer, 109 enlisted men, and 1 civilian. Most of the enlisted men were mechanics, the requirement for which was based on a ratio of one and one half mechanics per utility helicopter and three per cargo helicopter. Thirty-two of the forty-one officers had to be qualified helicopter flight instructors. The bulk of the requested officers would be trained as fixed wing instructors, replacing some instructors then assigned to the Air Training Department who were to be trained as helicopter instructors. At least ten additional utility helicopters would be required for instructor training and would have to be provided no later than 11 December. In order to conduct the transport helicopter class, it would be necessary to provide thirty-five utility helicopters and twelve cargo helicopters. The mechanics for the maintenance of those helicopters were to be provided concurrently with the delivery of the helicopters.

The necessity of factory training for instructor personnel would arise only for cargo helicopters. The Artillery School therefore requested that it be authorized to send one officer and two enlisted instructors to the appropriate factory for a course in the erection and maintenance of cargo helicopters.[4]

The expansion of training activities at the Artillery School placed a strain upon the facilities at Fort Sill. Early in April 1951, Army Field Forces began studying the feasibility of moving a

portion of the helicopter training to Fort Riley. Prohibitive costs, however, kept all of the training at Fort Sill until the founding of the Aviation School at Fort Rucker in 1953.[5]

Expansion of Courses

Changes in the Army helicopter program in the summer of 1952 required a major revision of the training program. The Department of the Army changed all warrant officer pilot spaces in the new transportation helicopter companies to officer pilot spaces. In addition, the Department approved a TOE for medical evacuation helicopter detachments which included officer helicopter pilots. The increase in personnel resulting from these actions and the proposed activation schedule of new units necessitated a revision in the course being conducted at the Artillery School for transport helicopter pilots.

Army Field Forces considered that the most desirable and economical method for training Medical Service Corps pilots would be to integrate them into the pilot course then being conducted for Transportation Corps personnel. That course could be revised to provide training for any service requiring only transport helicopter type training.

Army Field Forces informed the Artillery School in late July that in order to provide personnel to fill both transportation and medical units on the dates required, it would be necessary to graduate 196 pilots—an increase of 46 over the number planned for fiscal year 1953. Future planning indicated that there would be a requirement for 235 Transportation Corps helicopter pilots by October 1954. It would therefore be necessary to enter approximately 250 students to produce the 196 required by August 1953 and 300 students to obtain the 235 required by October 1954.

Army Field Forces anticipated that personnel for all future Transportation and Medical Service pilot classes would be officers. It would be necessary at first to assume that all students would meet the existing fixed wing flight time requirements required for the Transportation Helicopter Pilot Course. OCAFF pointed out to the Artillery School that it might be necessary to arrange classes so as to graduate part of the personnel for certain units prior to the unit ready date. Classes were to start no later than the scheduled transportation helicopter class in September 1952.

The expansion in the number of helicopter units naturally led to an increased demand for mechanics. Army Field Forces believed that the most efficient method of meeting this requirement would be to expand the existing Transportation Helicopter Mechanic Course. In order to meet the requirements for transport helicopter mechanics, it was necessary to graduate 266—116 more than the number which had been planned for fiscal year 1953. In addition, future requirements for Transportation Corps helicopter mechanics were 430. Therefore, 360 students would have to be entered to obtain the 266 required by August 1953, and approximately 580 students to get the 430 needed by October 1954.

The Artillery School reported that the men and equipment were available to start both the pilot and mechanic courses in September. There was sufficient time to train pilot instructors prior to the expansion in the sizes of the classes in January 1953. The most expeditious manner of

obtaining flight instructors was to authorize the retention of approximately 20 percent of each of the first four classes. The Artillery School proposed a class capacity of 25 mechanics each two weeks, beginning in September, and building up to a resident load of 175 mechanic students by 12 January 1953. This solution reduced the requirements for classrooms and training aids, and resulted in the maximum use of assistant enlisted instructor personnel.[6]

Liaison Pilot Training

Early in 1950, the training of liaison pilots for the Army was still being conducted in two increments—the Air Force Liaison Pilot Course at Connally Air Force Base, and the Light Aviation Officer Course at the Artillery School. In November 1949, the Army Field Forces had requested that the Air Force expand the quota for the liaison pilot training program from thirty-five to forty students per class. At the same time, the attrition factor was adjusted from 40 to 26 percent, a change which was expected to meet the requirement to fill existing pilot vacancies. Army Field Forces also requested that there be some flexibility in class capacity to allow for unexpected changes in National Guard input.

The Air Training Command agreed to the changes in class quotas and attrition rate, but refused the request for flexibility in class entrance rates. As a possible solution to the problem, the Air Training Command suggested that the number of Regular Army students be increased or decreased to adjust for any problems encountered with the National Guard quota. Army Field Forces replied that this was not a satisfactory solution since the Regular Army students were assigned on a permanent change of station, and it would be injurious to morale to make last minute changes. The Air Training Command finally agreed to permit small overloads in the class capacity of forty as long as this was compensated by a reduction in the size of subsequent classes. The Army furnished three additional L-16s for the expanded training program.[7]

In May, the Department of the Army informed Army Field Forces that the output of trained aviation officers from the Artillery School had only moderately exceeded the normal attrition rate. With the recent reduction in the number of reserve officers on extended active duty, the need for an additional input into the aviation program was imperative. The Department of the Army recommended that the class quota for Regular Army and reserve officers on extended active duty be doubled from twenty to forty. At the same time, the quota for Reserve and National Guard officers in the classes would remain the same, requiring a class input of sixty.

The Air Force informed the Army that this proposed increase could be met provided additional resources were available. The Department of the Army informed the Army Field Forces in August that the aircraft required were not available because of operational commitments. It requested that other means be considered to accelerate training to meet current and projected requirements. It had suggested to the Chief of Staff of the Air Force that the curriculum be revised to eliminate nonessential elements and that the work week be increased to forty-four hours. Apparently the question of expanding pilot training was related to the increased requirements resulting from the war, rather than the original personnel problems.

In September, the Department of the Air Force agreed to expand the training classes from forty to forty-eight students, an increase of 20 percent. Army Field Forces advised the Artillery School that this increase at Connally Air Force Base could be expected to result in a corresponding increase in the tactical phase of training.[8]

The need for trained pilots soon led to another increase in the fixed wing training program. On 7 February 1951, the Department of the Army directed Army Field Forces to expand the class capacity to fifty students effective 2 April. The frequency of the class also was changed to one class every six weeks. The Army would furnish the Air Force with thirty-six L-16s and seven L-5s to conduct this expanded training program. This expansion raised the annual output of this course to 300 pilots per year.[9]

The Department of the Army submitted its training requirements for fiscal year 1952 in April 1951. At first estimate, the Army stated that it would need 624 light aviation officers, a requirement which increased to 1,542 by the time a conference was held on 22 May. At the conference, the Air Force representatives stated that they would be able to train the necessary number of pilots, but requested that they be given a day to study the requirement and to compute the number of training aircraft to be furnished. On 24 May, the Air Force furnished a plan for a 17-week course for fixed wing pilots which would begin on 27 August 1951 with a class capacity of 255 and an attrition rate of 25 percent. The student load varied from 131 in July to 867 in late November. The Air Force estimated that it would need 388 L-19s and 136 L-5s by November to conduct the training. These aircraft would be furnished on a phased schedule as the student load expanded.

On 25 May, the Department of the Army requested that OCAFF study the Air Force training proposal to determine if the Army could accept the trainees from the Air Force at the proposed rate and phase them into tactical training at Fort Sill. Consideration was to be given to aircraft production schedules and availability of housing and classroom facilities and instructor personnel. Shortly thereafter, the Department of the Army questioned the Artillery School concerning the capabilities of the Air Training Department. The School prepared a preliminary plan in which it would receive student aviators from San Marcos Air Force Base beginning on 15 December 1951 at a rate of 200 per month. OCAFF also asked the Air Training Department for a preliminary estimate of what additional instructor personnel, aircraft, and facilities would be required. The Artillery School felt it could handle the proposed load, but would need 14 additional flight instructors—one-third of whom could be civilians, 13 officers and 4 enlisted ground school instructors, 255 2-place training aircraft (preferably L-19s), an additional stage field, and two expandable hangars.[10]

Fixed Wing and Helicopter Mechanic Training

During World War II, student aircraft mechanics were selected from members of the ground forces who had considerable mechanical experience. These men received extensive training in maintenance and repair of aircraft and engines in an enlisted Field Artillery Air Mechanic Course. Course graduates were capable of performing all first and second echelon maintenance.

After World War II, the Army fixed wing mechanic and the Army and Air Force rotary wing mechanic programs were conducted at Sheppard Air Force Base, Texas. This training was shifted to Gary Air Force Base when that installation was reactivated early in 1951.[11]

Early in November 1949, the Department of the Army directed the Chief of Ordnance to hold a conference to determine the adequacy of the Airplane and Engine Mechanic Course conducted by the Air Force. When this course had been given at Fort Sill, it covered only the L-4 and L-5 aircraft. The length of the course was then 520 hours, conducted during thirteen weeks. After the transfer of the training to the Air Force, 130 academic hours were eliminated due to the change from a 40- to a 30-academic hour week. At the same time, L-17 instruction was added to the course.

The conference reported that although the course was basically sound, insufficient time was devoted to many subjects and the course was therefore inadequate for training either organizational or field maintenance mechanics. Accordingly, the course syllabus was reviewed and changes were prepared at the conference. As a result of the conference, the Department of the Army requested that the Air Force increase the academic week to thirty-five hours.[12]

Early in 1950, the Department of the Army began to consider a proposal to discontinue training of maintenance personnel by the Air Force and to train the men at Fort Sill. In response to a request from Army Field Forces, the Artillery Center reported in June 1950 that additional overhead would be required at the Artillery School in order to train Army aircraft maintenance personnel. Along with costs for machinery, supplies, transportation, utilities, and miscellaneous items, the cost per student would be $517.32. These overhead costs were based on an airplane and engine mechanic class of sixteen beginning every month and a rotary wing mechanic class of eight starting every two months. If classes were scheduled every two weeks for liaison aircraft and engine mechanics and every four weeks for rotary wing mechanics, six additional sergeants would be required in the personnel overhead and the cost would be increased approximately 13 percent. Classroom facilities were available at the Artillery School, but an estimated $20,000 would be required to cover rehabilitation. Training aids would be transferred from Sheppard Air Force Base to Fort Sill by Army trailer. By moving to Fort Sill, mechanics would get better integrated tactical training and would work on the type of aircraft which they would have to maintain in the field. Instruction could be given covering the day-to-day difficulties experienced by the Artillery School in the maintenance of aircraft peculiar to the Army. No further action was taken on this proposal as the Army raised the question of assuming all training of Army aviation personnel.[13]

Army Field Forces continued to urge that the Department of the Army take action to transfer maintenance training. Late in 1950, the Chief of Ordnance recommended that he be authorized to establish the necessary maintenance training program for aircraft and engine mechanics on a contract basis at CAA licensed civilian aircraft maintenance schools. In January 1951, the Department of the Army informed the Chief of Ordnance that the entire problem of supply and maintenance of liaison and helicopter aircraft was under study and no action would be taken on the Ordnance recommendation.

The Department of the Army established a course for training Army helicopter mechanics at the Artillery School in January. The 19-week course, which began on 15 March, was designed to assist the Chief of Transportation in meeting requirements for helicopter mechanics in Transportation Corps units. The Chief of Ordnance protested to the Department of the Army that this course had been established without coordination with his office, maintaining that he had the responsibility for providing trained ordnance field maintenance personnel to support the using units.[14]

In February 1951, the Department of the Army informed the Air Force of the revised training requirements for fiscal year 1951. While the requirement for fixed wing mechanics remained at 200, the requirement for helicopter mechanics was increased from 250 to 425. The Department of the Army agreed to furnish nine additional helicopters to the Air Force to conduct this training.[15]

The expansion in the number of helicopter units during 1952 led to an expanded training program for helicopter mechanics which took place at the same time that helicopter pilot training was increased.

Development of Instrument Training

It was often necessary for Army pilots to fly in all types of weather in order to accomplish their mission. Experience gained in World War II indicated that Army pilots had to fly under adverse conditions in combat, and a number of pilots were killed because they lacked instrument flight training. Early in fiscal year 1949, emphasis on arctic operations made it even more essential that Army pilots be able to fly under instrument conditions.

Army Field Forces initiated an experimental instrument flight training course for selected aviation officers in 1949. There were several types of combat flying situations in which instrument training would be of decided value: marginal weather flying, night flying, arctic flying, and extended overwater flying. OCAFF believed that instrument proficiency would add a considerable factor of safety and success to all these flying conditions. Marginal weather and night flying were required in almost every combat operation.[16]

The Liaison Pilot Training Course conducted by the Air Force was designed to qualify Army officers as liaison pilots proficient in flying under contact, marginal weather, and night flying conditions. The course included fifteen hours of instrument flying instruction and ten hours of instrument trainer instruction.

In late 1949, the Department of the Army suggested that Army Field Forces conduct another test of instrument training. OCAFF replied that in its opinion the Air Force training was inadequate to meet current requirements. It had discovered that only twelve and one-half actual flying hours of instrument training were being received. OCAFF believed that the instrument training course as originally agreed upon with the Air Force would be adequate for student Army aviators if conducted for the full fifteen hours. There were approximately 500 Army aviators on active duty who graduated from flight school prior to the inclusion of instrument training, only four of whom were found to have current instrument ratings. It was therefore not feasible for the

Army to undertake the instrument training proposed by the Department of the Army. OCAFF suggested that the Air Force train sufficient Army instructors who could then train Army personnel.[17]

The Air Force made an effort to improve instrument training in the Liaison Pilot Training Course, but no satisfactory solution was found for training aviators who had completed the course. In early June 1951, OCAFF requested that the Department of the Army provide funds for training aviators as instrument pilots in civilian schools. The Department of the Army approved this request on 19 June, and directed OCAFF to submit recommendations for a permanent program designed to meet requirements for instrument training.[18]

In July, OCAFF contacted both the Air Force and the Artillery School to determine their ability to provide the required instrument training. The plan proposed by OCAFF provided not only for instrument training of student officers enrolled in a regular course of flight training, but also for those aviators who had already graduated and could not receive instrument training under the recently initiated civilian program.

OCAFF envisioned the students in the Liaison Pilot Course at San Marcos Air Force Base receiving the maximum amount of instruction in instrument flying and related academic subjects which their level of flying experience would enable them to absorb. Then during the tactical phase of training at Fort Sill, the students would receive the remainder of the instruction necessary to qualify them as instrument pilots. Students entering the aviation courses at Fort Sill without having attended the Liaison Pilot Course at San Marcos would receive at Fort Sill all instruction necessary for qualification as instrument pilots. Army aviators who did not attend a civilian instrument pilot training school under the interim program would attend an instrument course at Fort Sill.[19]

In July, the Joint Standardization Board approved an integrated program of instruction for the Liaison Pilot Course and the Army Aviation Tactics Course which would graduate students from Fort Sill with a Civil Aeronautics Administration instrument card. Two months later, the Artillery School submitted to OCAFF the requirements for additional men and equipment necessary to conduct this expanded training program. The instrument phase of the course was to be four weeks in length, with twenty-five students reporting each week.

OCAFF prepared an instrument training program based on recommendations of the Joint Standardization Board and the Artillery School. In addition to these programs, OCAFF recommended to the Department of the Army that Army instrument certificates be established incorporating the best features of the Air Force, Navy, and CAA instrument requirements. The proposed plan was based on a two card system—Army instrument certificate (standard) and Army instrument certificate (special). The standard certificate incorporated the requirements outlined in the training circular prepared by the Artillery School, while the special certificate included the requirements for the standard certificate in addition to experience requirements.

The inclusion of instrument training in the military aviation courses would take place at such time as the necessary equipment became available. OCAFF had initiated procurement requests for LC-126 aircraft for use by the Artillery School as an instrument trainer and C-8 synthetic

instrument trainers. It expected the instrument phase of the flight courses to be implemented some time after 1 July 1952. Civilian contract schools would continue to operate until that time. The Air Training Department at Fort Sill took the necessary action to qualify instrument instructors to implement the program when equipment became available. The source of students for instructor training was from within the Air Training Department, but this would not provide enough instructors to meet the requirement.[20]

Continued shortages of equipment and a shortage of instructor personnel delayed the implementation of the full instrument training program. In April 1952, the Artillery School submitted a proposed program of instruction for an Army Aviation Instrument Course. OCAFF directed in November that the Army Aviation Instrument Course be fully implemented by 1 July 1953. It also directed that a program of instruction be prepared for an instrument flight examiner course which was not to exceed four weeks.

Army Field Forces informed the Artillery School that it was essential that instrument flight training be phased into the fixed wing pilot course as soon as practicable. Delivery of L-19 basic instrument trainers to San Marcos Air Force Base would begin in January 1953. The San Marcos phase of the course would be integrated as soon as sufficient L-19 instrument trainers became available to augment the L-5 trainers on hand. The Artillery School would integrate its portion of instrument training into the Army Aviation Tactics Course, phasing it with the implementation of the San Marcos course. Integration of this training was coordinated with San Marcos Air Force Base through the Joint Standardization Board.

The shortage of personnel continued to delay full implementation of the courses. In January 1953, the instrument course was organized and placed under the supervision of the Department of Flight of the Army Aviation School at Fort Sill. Army Field Forces informed Fourth Army that full implementation of the courses would not be scheduled until fiscal year 1954. In August 1953, the Instrument Flight Examiner's Course finally was initiated to teach pilots to conduct and grade the Army's annual instrument flight examinations. The students received about forty hours of instrument time during the 4-week course.[21]

Endnotes

Chapter VI

1. DF Cmt 1, OCAFF G-3 to CofS, 4 Aug 50, subj: Training of Army Aviation Personnel.

2. Df Cmt 3, G-3 to CAFF, 19 Aug 50, subj: Training of Aviation Personnel.

3. (1) Df Cmt 2, Ord Sec to G-3 Sec, 5 Feb 51, subj: Aircraft and Engine Mechanic Training (MOS 0747). (2) Report of Ad Hoc Committee on Evaluation of the Current System of Training Army Aviators and Mechanics, undated.

4. (1) History of the US Army Artillery and Missile School, Vol. III, p. 237. (2) Ltr AGAO-S 353 (1 Feb 51), DA G-3 to CAFF, 7 Feb 51, subj: Training of Army Aviation Personnel. (3) Ltr ATTNG-27 353, CAFF to CG, The Artillery Center, 8 Nov 50, w/1st Ind, AG 353.11 AKPSIAT (9 Nov 50), Cmdt, The Artillery School, to CAFF, 26 Nov 50, subj: Training of Army Aviation Personnel.

5. Msg, OCAFF to Fifth Army, 101500Z Apr 51, subj: Feasibility of Moving Light Aviation Helicopter Training.

6. (1) Ltr ATTNG-32 353 OCAFF to Artillery School, 21 Jul 52, subj: Transport Helicopter Pilot Training, w/2d Ind AG 352.11 AKPSIRI-AT (21 Jul 52), Artillery School to OCAFF, 28 Aug 52. (2) Ltr ATTNG-32 353, OCAFF to Artillery School, 28 Aug 52, subj: Transport Helicopter Mechanic Training, w/2d Ind AG 352.11 AKP- SIRI-AT (28 Jul 52), Artillery School to OCAFF, 28 Aug 52.

7. (1) Ltr 353 Fly, CG Air Training Command to CAFF, 10 Oct 49, subj: Liaison Pilot Training Program, w/1st Ind ATTNG-27 353 (10 Oct 49), CAFF to CG Air Training Command. (2) Ltr 353 Fly, CG Air Training Command to CAFF, 18 Jan 50, subj: Increased Entrance Rate in Liaison Pilot Training Program, w/1st Ind ATTNG-27 353 (18 Jan 50), CAFF to CG Air Training Command, 8 Feb 50, and 2d Ind 353 Fly, CG Air Training Command to CAFF, 17 Apr 50.

8. (1) Ltr AGPA-UT 210.63 (11 Apr 50) CSGPA-O-CA, DA to CAFF, 9 May 50, subj: Increase in Student Officer Quota for Army Aviation Training. (2) Ltr AGAO-C 353 Aviation (21 Jun 50), DA G-3 to CAFF, 17 Aug 50, subj: Expansion of the Liaison Flying Training Program. (3) Ltr AGAO-S 353 (15 Sep 50), DA G-3 to CAFF, 22 Sep 50, subj: Expansion of Liaison Flying Training Program. (4) Ltr ATTNG-27 353.01, CAFF to CG Artillery Center, 2 Oct 50, subj: Expansion of Liaison Flying Training Program.

9. Ltr AGAO-S 353 (1 Feb 51), DA G-3 to CAFF, 7 Feb 51, subj: Training of Army Aviation Personnel.

10. (1) Ltr AGAO-S 363, DA to OCAFF, 17 Apr 51, subj: FY 1952 Requirements for Training of Army Aviation Personnel, w/1st Ind ATPER 353 (17 Apr 51), OCAFF to DA, 11 May 51. (2) MFR, 1 Jun 51, subj: Fiscal Year 1952 Army Aviation Training Requirements.

11. Tierney and Montgomery, *The Army Aviation Story,* p. 80.

12. (1) Ltr CSGOT 353 (15 Jul 49), Dir of O&T to CAFF, 29 Nov 49, subj: Requirements for Training of Aircraft Maintenance Specialists, w/Inds. (2) DF 353 (29 Nov 49), AG to G-3, 29 Nov 49, subj: Requirements for Training of Aircraft Maintenance Specialists, Cmt 2, G-3 to CofS, 15 Dec 49.

13. Ltr ATTNG-27 353, OCAFF to ACofS G-3, 30 Mar 50, subj: Training of Army Aircraft Maintenance Personnel, w/3d Ind AKPSIAT (30 Mar 50), CG The Artillery Center to OCAFF, 2 Jun 50.

14. (1) Msg, OCAFF to CofSA, 181433Z Aug 50. (2) Memo, Maj Gen E.L. Ford, CofOrd, for Lt Gen T.B. Larkin, ACofS G-4, 1 Mar 51, subj: Army Aircraft Maintenance Training.

15. Ltr AGAO-S 353 (1 Feb 51) GS, DA to CAFF, 7 Feb 51, subj: Training of Army Aviation Personnel.

16. (1) Msg, CAFF to CG Arty Cen, 131650 Jan 49. (2) 4th Ind ATTNG-27 211(LnO) (17 Mar 49), CAFF to Dir of O&T GS, 4 Jun 49, to ltr AF100S 211-1, CG Tenth Air Force to CG Continental Air Cmd, 17 Mar 49, subj: Instrument Ratings for Liaison Pilots.

17. MFR and 8th Ind ATTNG-27 211 (LnO) (17 Mar 49), OCAFF to ACofS G-3, 17 Mar 50, to ltr AF100S 211-1, CG Tenth Air Force to CG Continental Air Command, 17 Mar 49.

18. DF ATTNG-22 352 (Arty Sch), OCAFF G-3 to CofS, 3 Jul 51, subj: Instrument Training for Army Aviators.

19. (1) Ltr ATTNG-22 352 (Arty Sch), OCAFF to Artillery School, 10 Jul 51, subj: Instrument Training for Army Aviation Personnel. (2) Ltr ATTNG-22 352 (Arty Sch), OCAFF to Air Training Command, 10 Jul 51, subj: Instrument Training for Army Aviation Personnel.

20. Ltr AG 352.11 AKPSIRI-AT, Artillery School to OCAFF, 19 Sep 51, subj: Instrument Training for Army Aviation Personnel, w/inds.

21. (1) Ltr ATTNG-32 352, OCAFF to Artillery School, 14 Nov 52, subj: Instrument Training for Army Aviation Personnel, 2/inds. (2) Tierney and Montgomery, *The Army Aviation Story,* p. 81.